

## CLAIMS

*Sub P1*

*5 10 15 20 25 30*

1. A method of operating a node in a communications network, which node is in use connected to a signal source external to the communications network, the method comprising:

5 a) receiving from the said signal source signals which include a control field, which control field takes one of a plurality of possible values, and the subsequent handling of the said signal by the network being controlled according to the value of the control field;

b) within a lower level of a messaging protocol running on the node, and prior to the processing of the signal by higher level functions running on the node, overwriting the control field with a value from a restricted subset of the plurality of possible values; and

c) subsequently processing the signal in the network in dependence upon the said value overwritten in step (b).

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2. A method of operating a communications network comprising:

a) communicating control signals between nodes of the network, which control signals conform to a predetermined signalling protocol;

b) at one of the said nodes, receiving from a signal source external to the network signals conforming to the said predetermined protocol and including a control field, which control field takes one of a plurality of possible values;

20 c) within a lower level of a messaging protocol running on the node, and prior to the processing of the signal by higher level functions running on the node overwriting the control field with a value from a restricted subset of the plurality of possible values; and

d) subsequently processing the signal in the network in dependence upon the said value overwritten in step (c).

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3. A method according to claim 1 or 2, in which step (c) is carried out within a data link layer interface, which data link layer interface is arranged to respond to service request from network layer functions of the node and to issue service requests to the communications network.

*Sub 2*

4. A method according to ~~any one of the preceding claims~~, in which the said control field is a routing control field, and the overwriting of the routing control field with a predetermined value in step (b) limits the routing of signals to or from the external source to part only of the communications network.

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5. A method according to claim 4, in which the routing of signals to or from the external source is limited to a point-to-point connection between the external source and the node.

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6. A method according to ~~any one of the preceding claims~~, in which the said signals conform to a common channel signalling protocol.

7. A method according to claim 6, in which the common channel signalling protocol is ITU-T Signalling System no. 7.

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8. A node suitable for connection in a communications network and comprising:

a) a network interface for connection to the communications network;

b) a signal interface for connection to a signal source external to the communications network;

c) means connected to the signal interface for overwriting, within a lower level of a messaging protocol, a control field in a signal received via the signal interface from the signal source with one of a subset of predetermined values; and

d) signal processing means for processing the said signal in dependence upon the value of the said control field.

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9. A node according to claim 8, in which the said means for overwriting are located within a data link layer interface, which data link layer interface is arranged to respond to service request from network layer functions of the node and to issue service requests to the communications network.

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10. A node according to claim 8 or 9, in which the signal processing means are arranged to route the signal in dependence upon the value of the said control field.

*a  
Sub S*

5 11. A communications network including a node according to claim 8 or 9 or  
10.

*X*

10 12. A communications network according to claim 11 including a common channel signalling network carrying signals conforming to a common channel signalling protocol and in which both the said network interface and the said signal interface are arranged to communicate signals conforming to the said common channel signalling protocol.

*Sub S*

13. A method of operating a node in a communications network, which node  
15 is in use connected to a signal source external to the communications network, the  
method comprising:

20 a) receiving from the said signal source signals which include a control field, which control field takes one of a plurality of possible values, and the subsequent handling of the said signal by the network being controlled according to the value of the control field;

b) overwriting the control field with a value from a restricted subset of the plurality of possible values; and

c) subsequently processing the signal in the network in dependence upon the said value overwritten in step (b)

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14. A method of operating a communications network comprising:

a) communicating control signals between nodes of the network, which control signals conform to a predetermined signalling protocol;

b) at one of the said nodes, receiving from a signal source external  
30 to the network signals conforming to the said predetermined protocol and including a control field, which control field takes one of a plurality of possible values;

c) overwriting the control field with a value from a restricted subset  
of the plurality of possible values; and

~~d) subsequently processing the signal in the network in dependence upon the said value overwritten in step (c).~~

*Sub B5  
cancel  
E1*

15. A method of operating a node in a communications network, which node is in  
5 use connected to a signal source external to the communications network, the  
node including a data link layer interface arranged to respond to service request  
from network layer functions of the node and to issue service requests to the  
communications network the method comprising:

10 a) receiving from the said signal source signals which include a control  
field, which control field takes one of a plurality of possible values, and the  
subsequent handling of the said signal by the network being controlled according  
to the value of the control field;

15 b) within the data link layer interface overwriting the control field with a  
value from a restricted subset of the plurality of possible values; and

15 c) subsequently processing the signal in the network in dependence upon  
the said value overwritten in step (b).

*claim 1*

16. A method according to ~~any one of claims 1 to 7 or claim 15~~, including writing  
control field data received on each of a plurality of signalling links into  
20 respective signalling link data buffers, and overwriting the control fields in the  
respective data buffers with the said value.

17. A node arranged to operate in accordance with the method of claim 15 or ~~16~~.

25 18. A method substantially as described with respect to the accompanying  
drawings.

19. A node substantially as described with respect to the accompanying drawings.

30 20. A communications network substantially as described with respect to the  
accompanying drawings.

*add B67*